...ITIES PERMIT (REV. 10/77)		PAGE 1 OF 8	
ENT AGENCY	COUNTY	SOLID WASTE FACILITY PERMIT NO.	
of West Covina	Los Angeles	19-AF-001	
NAME		DATE PROPOSED	4/10/79
. Company Landfill		BOARD APPROVAL	4-27-79
. Kazarian Jr.		ENFORCEMENT AGENCY APPROVAL	
LOCATION			
South Azusa Avenue, West Covina, Calif. 91790			

REPORT OF INFORMATION

. FINDINGS

A. This facility is a 583-acre Class I-II sanitary landfill. It is located in the southerly portion of the City of West Covina in the San Jose Hills. Access to the property is from the east side of Azusa Avenue, 1500 feet north of Amar Road. The existing sanitary landfill facility has been operating under Unclassified Use Permit (UUP)71, Revision 5 (Amended). The site originally operated as a Class II-III landfill commencing in 1962 under Unclassified Use Permit 71. In February 1963 the landfill became a Class I-II site in accordance with the regulations set by the Unclassified Use Permit 71 of the City of West Covina. The zoning within one thousand feet of the sanitary landfill is light commercial and residential.

This permit is granted solely to the operator named above, and is not transferable. Upon a change of operator, this permit is subject to revocation. Upon a significant change in design or operation from that described in this permit or in attachments thereto for the existing design and operation of a facility operating immediately prior to August 15, 1977, or from the approved intended design and operation of a facility which was not operating prior to August 15, 1977, or which herein is granted a permit modification, this permit is subject to revocation, suspension, modification or other appropriate action.

This permit does not authorize the operation of any facility contrary to the State Minimum Standards for Solid Waste Handling and Disposal. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other government agencies.

MENT AGENCY			
of West Covina, County of Los Angeles Department of Health Services			
(SIGNATURE) Harry W. Thomas Charles W. Coffee	TYPED NAME HARRY W. THOMAS/CHARLES W. COFFEE	DATE	12/8/

1. This facility receives an estimated [redacted] tons of Class II-III solid wastes annually.

2. This facility receives an estimated [redacted] tons of Class I-II liquid wastes annually.

   a. Types of hazardous wastes accepted by the landfill are specified in the guidelines for the handling of hazardous wastes dated February 1975, California Department of Health.

   b. Types of wastes not accepted by the landfill are as follows:

      (1) Radioactive material.

      (2) Agent orange - 2,4T.

      (3) Any material as determined by the City which cannot be handled so as to avoid hazard to life, limb, property and/or the public welfare shall be prohibited.

3. Design and operation of this facility are as specified by Unclassified Use Permit (UUP 71, Revision 5 (Amended), Sections 20 and 21. Unclassified Use Permit (UUP) 71, Rev. 5 (Amended), and Report of Disposal Site Information, June 1978 as subsequently amended are hereby made a part of this permit.

4. Hours of operation are as follows:

   a. Solid Waste Materials - 6:00 A.M. - 6:00 P.M.
   Daily except Sundays and certain holidays. Further requirements concerning hours of operation are as specified by Unclassified Use Permit (UUP) 71, Revision 5 (Amended), Section 33.

5 A resource recovery project is being conducted at the site.

6 Construction of a higher capacity gas recovery system equipped with [redacted] is to be constructed during the first quarter calendar year 1979.

7 The City of West Covina and the County Sanitation Districts shall request the State Department of Health Services in conjunction with the State Solid Waste Management Board to conduct an odor mitigation study which will be generally applicable to sanitary landfills.

B. The following documents condition the design and operations of this facility.

1. Revised waste discharge requirements No. 75-145, 63-31 issued by the California Regional Water Quality Control Board No. 4, Los Angeles Region.
2. Unclassified Use Permit No. 71, Revision 5, (Amendment), adopted on June 14, 1976, by the City of West Covina.
3. Annual South Coast Air Quality Management District Permits.

C. This facility is in compliance with State minimum standards as determined by physical inspections made on a daily basis.

D. This site was established before August 28, 1974, therefore, no finding of need and necessity from the State Solid Waste Management Board is required.

E. This facility is shown as existing in the Los Angeles County Solid Waste Management Plan.

F. This permit is consistent with the Los Angeles County Solid Waste Management Plan and the State Minimum Standards for solid waste handling and disposal.

II. CONDITIONS

A. REQUIREMENTS

1. This facility must comply with all of the State minimum standards for solid waste handling and disposal.

2. This facility must comply with all federal, state and local requirements and enactments.

3. Additional information concerning design and operation of this facility must be furnished upon request of the enforcement agency.

4. The sanitary landfill shall furnish a description of the salvage operations within sixty (60) days of issuance of this permit, including not limited to, quantities and types of materials salvaged, method of operation and safety procedures.

   a. [redacted] shall be submitted to the City of West Covina and the County of Los Angeles Department of Health Services.

b. Salvaging operations of any kind are subject to the approval of the City of West Covina and the County of Los Angeles Department of Health Services.

5. All injection wells shall be clearly marked with the international symbol for poison.

6. The operator shall participate with the State Department of Health Services, the State Solid Waste Management Board, the County Sanitation District and/or any other interested operators of sanitary landfills in the conduct of an odor mitigation study. In the event that the State agencies are unable to conduct an odor mitigation study, BKK in concert with other sanitary landfill operators or unilaterally shall initiate action to proceed with the required odor mitigation study.

a. Within 6 months of the issuance of this permit a review shall be conducted by the City of West Covina with the concurrence of the State Solid Waste Management Board to determine if satisfactory progress is being made toward the initiation of the odor mitigation study. In the event that the City and/or the State Solid Waste Management Board finds progress to be unsatisfactory, the conditions of this permit shall be subject to further review and/or modification.

b. The conditions of this permit shall be subject to review at 6-month intervals during the conduct of the

odor mitigation study. In the event that the City with the concurrence of the State Solid Waste Management Board finds that progress in the conduct of the study is unsatisfactory, the conditions of this permit shall be subject to further review and/or modification.

c. Upon completion of the odor mitigation study, the operator shall present to the City and the County of Los Angeles Department of Health Services a plan and schedule subject to the approval of the City and the County of Los Angeles Department of Health Services of how compliance with the odor mitigation recommendations is to be obtained.

d. Within 6 months of the approval of the plan and schedule of compliance, the operator shall commence implementation of the recommendations contained in the study.

e. The conditions of this permit shall be reviewed annually by the City and/or the Solid Waste Management Board and the County of Los Angeles Department of Health Services to determine the operator's continuing compliance with the recommendations contained in the odor mitigation study.

B. PROHIBITIONS

The following actions are prohibited at this facility:

1. No burning of any kind will be permitted in connection with disposal operations at this site.
2. Feeding of refuse to animals is prohibited.

3. The following items are non-salvageable materials:

   a. Food and food products.

   b. Beverages.

   c. Drugs, cosmetics.

   d. Hazardous chemicals, poisons, pesticides.

   e. Medical wastes, syringes, needles and similar materials.

C. SPECIFICATIONS

1. No significant change in design or operation from that described in Item A of the findings section is allowed, except for those changes as are required under the conditions section of this permit.

D. PROVISIONS

The following provisions must be met:

1. This permit is subject to review by the local enforcement agency and may be suspended, revoked or modified at any time for [redacted]

2. This facility may accept those hazardous wastes specified in the guidelines for the Handling of Hazardous Wastes dated February 1975, California Department of Health, if they are handled in accordance with the provisions of Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code and the regulations promulgated under Chapter 21. Section A through H) of the Unclassified Use Permit No. 71, Revision 5 (Amended) of the City of West Covina.

3. This site is subject to full compliance under the Unclassified Use Permit 71, Revision 5 (Amended), of the City of West Covina.

E. SELF-MONITORING

1. Environmental measurements shall be handled in accordance with the regulations of Chapter 13 (Sections A through D), Chapters 14 through 16, Chapter 17 (Sections A through C) of the Unclassified Use Permit No. 71, Revision 5 (Amended) of the City of West Covina.

2. Annual and Monthly Activity Reports shall be submitted in accordance with the regulations of Chapter 12 (A and B) of the Unclassified Use Permit No. 71, Revision 5 (Amended) of the City of West Covina.

3. The operator shall develop an operations manual to monitor incoming wastes loads and safely dispose these wastes on the landfill site. These operations shall comply with the regulations promulgated under Chapter 20 (Sections A through G) of the Unclassified Use Permit No. 71, Revision 5 (Amended) of the City of West Covina. Such operations manual upon approval by the City of West Covina shall become a part of the conditions of this permit by reference.

APENDIX B

TYPES AND QUANITITES OF WASTE RECEIVED

WASTE QUANTITIES DISPOSED
at
BKK CLASS I SANITARY LANDFILL
WEST COVINA, CA
for
CALENDAR YEAR 1977

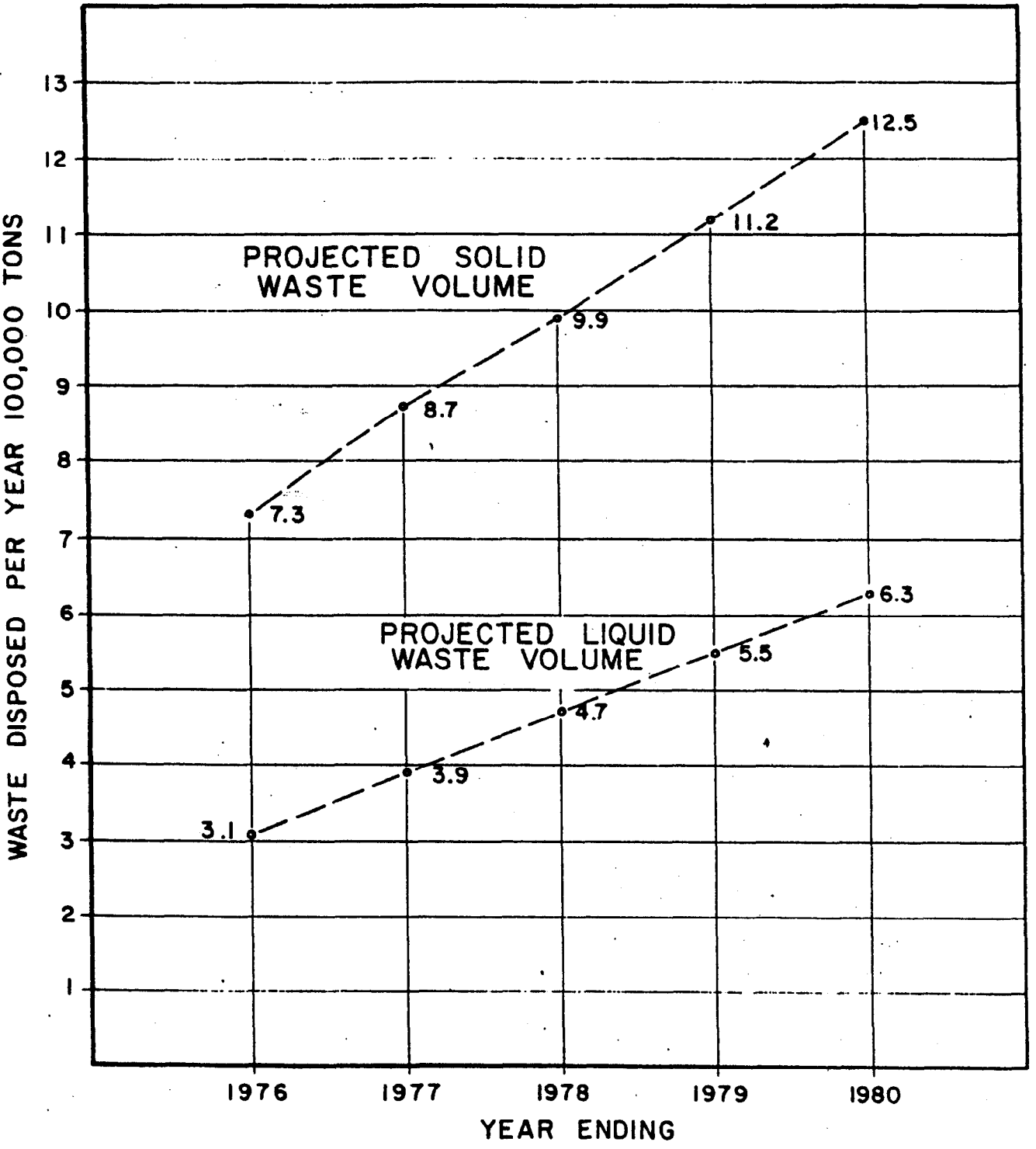
DISTRIBUTION OF LIQUID WASTES DISPOSED (Total for year 1977)

TYPE OF WASTE	QUANTITY (GALLONS)
Acid Solutions	10,438,893
Alkaline Solutions	17,686,679
Pesticides	32,622
Paint Sludges	1,593,003
Solvents	2,302,729
Tetraethyl Lead Sludges	8,760
Chemical Toilet Wastes	8,400
Tank Bottom Sediments	14,415,325
Oily Wastes	2,366,740
Drilling Mud	3,443,292
Contaminated Soil & Sand	146,360
Cannery Wastes	4,345,062
Latex Wastes	111,430
Mud & Water	7,314,762
Brine	82,300
Other Hazardous	575,407
Other Non-Hazardous	122,995
TOTAL	64,994,759

SOLID WASTE QUANTITIES

MONTH	NO. OF LOADS	TONS DISPOSED	
		HAZARDOUS	NON-HAZARDOUS
JANUARY	9,653	117	60,189
FEBRUARY	10,630	486	56,113
MARCH	11,626	523	67,841
APRIL	12,751	571	68,394
MAY	10,957	509	66,516
JUNE	12,994	598	77,522
JULY	12,956	549	71,923
AUGUST	13,269	627	78,655
SEPTEMBER	12,836	675	74,713
OCTOBER	12,978	527	81,479 ÷ 24
NOVEMBER	12,728	814	79,547
DECEMBER	11,277	445	79,936
TOTAL	144,655	6,441	862,828

PROJECTED ANNUAL SOLID AND LIQUID WASTE DISPOSED



RDSI .1978

DISPOSAL SITE INFORMATION

AND

OPERATIONS PLAN

FOR

B.K.K. Sanitary Landfill

2210 South Azusa Ave.

West Covina, California

June, 1978

Prepared By : JOSEPH R. JOHNSON
CE 27056

Site Operator:

B.K.K. LANDFILLS

A Division of B.K.K. Corporation.

Tele: (213) 965-0911

PREFACE

This document has been prepared by the BKK Corporation in conformance with the requirements of the City of West Covina, California, The California State Department of Health, California State Solid Waste Management Board, and Federal Environmental Protection Agency.

Although the requirements of each of these entities are somewhat different in content, this document was prepared to cover the requirements of all under a single cover.

The information contained herein is intended to comply with agency requirements as follows:

City of West Covina -	Conditional No. 11 of Unclassified Use Permit No. 71, Revision 5 (Amendment) dated June 14, 1976, Operational Plan.
California State Dept. -	Chapter 2, Minimum Standards for Management of Hazardous and Extremely Hazardous Wastes, Article 4, Section 60193, Operation Plan.
California State Solid -	California Administrative Code, Title 14, Section 17616, Report of Disposal Site Information.
Environmental Protection -	Federal Register Part V, Polychlorinated Biphenyls (P.C.B.'s) Annex II, Section 761.41 Chemical Waste Landfil Requirements for the disposal of PCB wastes.

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E	Regional Water Quality Control Board Requirements
F	South Coast Air Quality Management District Permits
G	Water Quality Control Board Report (Typical)

1. MANNER OF OPERATION

The BKK Sanitary Landfill is operated in compliance with all applicable State and local regulations and requirements for a solid waste disposal site. Class I and II requirements are prescribed by the Regional Water Quality Control Board. (Exhibit 9).

1a. HOURS OF OPERATION

The depositing of waste and refuse on the site shall only be permitted during the following schedule of hours:

Solid Waste Materials	6:00 a.m. to 5:00 p.m.
Liquid Waste Materials	6:00 a.m. to 5:00 p.m.

In any event, all depositing of solid and liquid waste will cease at one (1) hour before sunset to permit daily cover to be completed before sunset.

1b. GENERAL PLANS FOR WASTE HANDLING

(1) Vehicles enter the site and are inspected and weighed to determine the appropriate fee. Liquid loads are sampled and tested to determine the method of disposal.
(2) Vehicles drive to the working area and dump solid refuse loads onto the ground. (Exhibit 1).
(3) Non-odorous, compatible liquid loads are discharged into a hole in the refuse. Odorous or non-compatible loads of reactive liquids are injected into wells provided for this purpose.
(4) After loads are dumped, crawler tractors compact the refuse to a density of approximately 1350 lb/cu. yd. An approximate average of 3,000 tons per day of waste is deposited at the site and fills approximately 4,444 cubic yards of space. The solid refuse is placed in cells approximately 20 feet high with a typical slope of 3:1. The hole into which non-odorous, compatible liquids are discharged is continually filled with solid refuse. The refuse absorbs the liquid and by the time earth cover operations are to commence, the hole is filled with compacted refuse. Extremely hazardous, hazardous, or odorous liquid loads may be placed: in injection wells drilled into the refuse, in special holes excavated into refuse, or injected by hose beneath the surface of liquid in the daily hole. (Specific application of special disposal methods is described in section 2 of this report). Increases are anticipated in solid and liquid waste received at the site as other sites in the Los Angeles Basin close. No substantial change in the operation would be required to accomodate anticipated increased volumes of as much as 2,000 tons/day.

TYPICAL LANDFILL

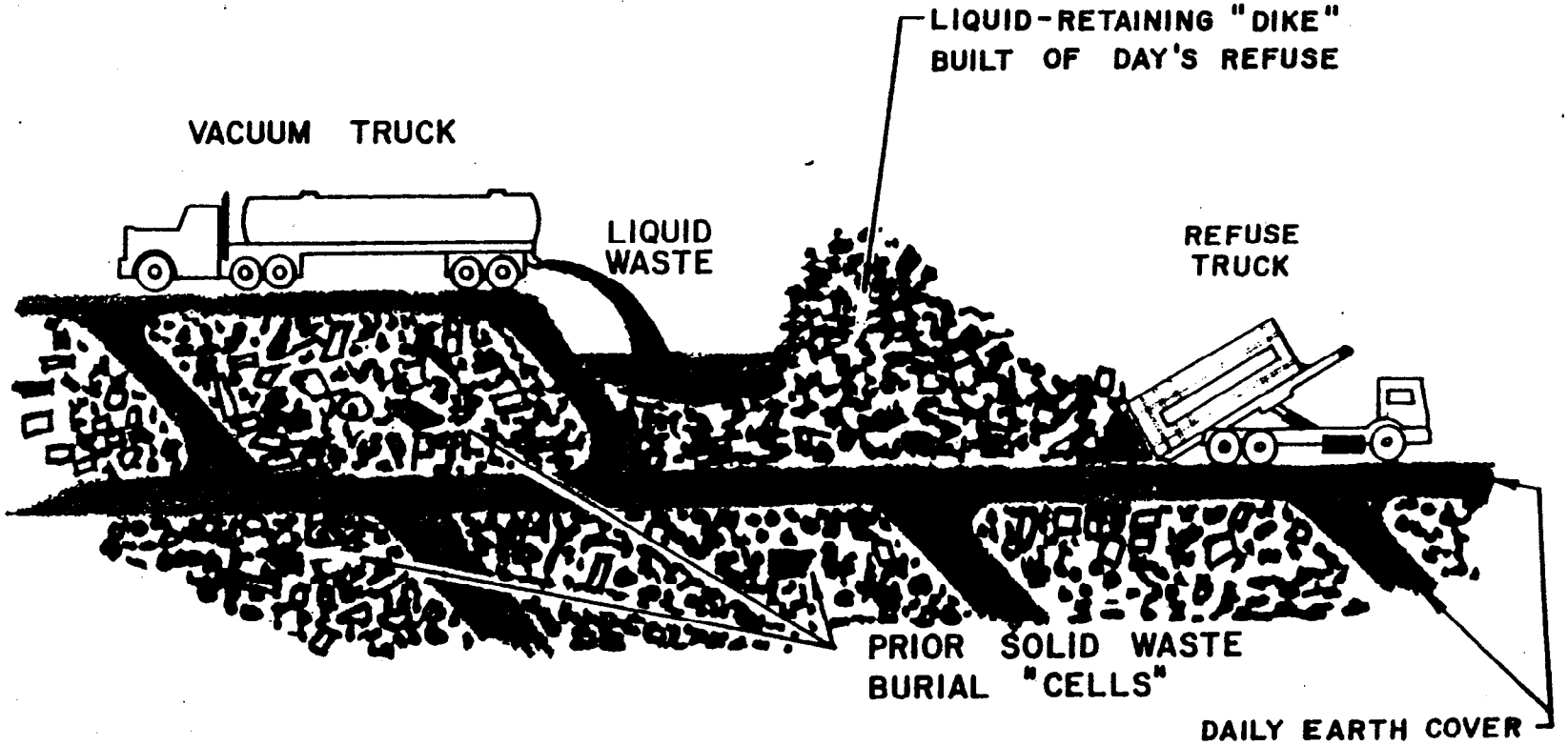


Exhibit 1

(5) Non-hazardous and non-odorous sludges with a high water content may be placed in shallow pits to permit the water to evaporate. After the material has dried the dry waste is mixed with earth and used in daily earth cover operations. The drying pits are located only on natural ground where this type operation will not cause leachate generation.

(6) Toward the end of each working day, scrapers carry dirt to the working face where it is placed over the compacted refuse. Approximately 1,200 cubic yards of dirt cover is required each day. Daily cover is approximately one foot in thickness. When an area of refuse fill is to remain undisturbed for 180 days or more an interim cover 2 feet in thickness is applied. All cover material is obtained from within the site.

(7) Every 25 feet vertically, a bench is constructed in a finished slope face to provide for improved slope stability, drainage and access for landscape maintenance.

1c. EQUIPMENT AVAILABILITY

The normal, daily requirement for equipment plus other available equipment is shown in exhibit 2. Spare equipment, spare parts and mechanics are available on site, or they can be readily obtained locally. The equipment storage and maintenance area is shown on Exhibit 11.

1d. EQUIPMENT DESCRIPTION

The pieces of equipment used to handle, compact and cover waste are:

Caterpillar D-8 Tractors with Dozer Blade
Caterpillar D-9 Tractors with Dozer Blade
Caterpillar 633 Scraper

Manufacturers specifications for similar equipment is contained in Appendix A. Site equipment is equipped with lighting for night operation when required. The other pieces of equipment on Exhibit 2 are used to support the waste disposal operation. Additional equipment is rented when required.

1e. SANITARY FACILITIES

Portable chemical toilets are furnished where permanent sewer connections are not available. At other locations full restroom facilities are furnished. All portable water on the site comes from the Suburban Water Company through meters located on Azusa Ave.

EXHIBIT 2

BKK LANDFI
SITE EQUIPMEN

EQUIPMENT TYPE

DOZERS

Cat. D-9
Cat. D-9
Cat. D-9
Cat. D-9

Cat. D-8
Cat. D-8
Cat. D-8

SCRAPERS

Cat. 633
Cat. 633
Cat. 633

MISC

Cat. 14 Blade
WABCO -66B Blade

Pet. Water Truck
GMC Service Truck

Hopto Backhoe

Ford Dump Truck

Mechanics Truck - Ford
Pickup Truck - Ford with Radio
Pickup Truck - Chevy with Radi

Water Truck - 1963 Kenworth

Compressor - Ingersol-Rand
Compressor

Water Pull
Light Set

Pickup Truck - Super Cab with Radio
Pickup Truck - Chevy

1f. CLIMATE

The climate in the West Covina area is characterized as semi-desert with frequently intruding mediterranean type marine moist air bearing fog or low stratus cloud overcasts. Typically, with westerly tending winds prevailing, night-time fog or low overcast builds, toward or after dark, burning off by mid-morning, giving way to warm hazy to clear days. With less frequent easterly tending winds prevailing, warm to hot days and nights result.

For Southern California, the dry season generally extends from April-May through October-November, with the rainy season occuring the balance of the year. During the rainy season, rainfall is infrequent, generally light to medium with occasional short periods of moderately heavy precipitation. Occasional relatively short duration thundershowers occur during summer months.

Winds in the foot hill areas are generally light when westerly tending winds prevail, and light to moderate, occasionally strong when easterly winds prevail. Typical diurnal temperature ranges during the summer months are from 70 to 100 degrees F. and during winter months from 40 to 80 degrees F.

Exhibit 3 lists weather characteristics obtained from the National Climate Center for the weather station at Ontario International Airport, the nearest recording center to West Covina, located 17 miles due east of the site. The wind rose for the station is presented in Exhibit 4.

1g. WET WEATHER OPERATION

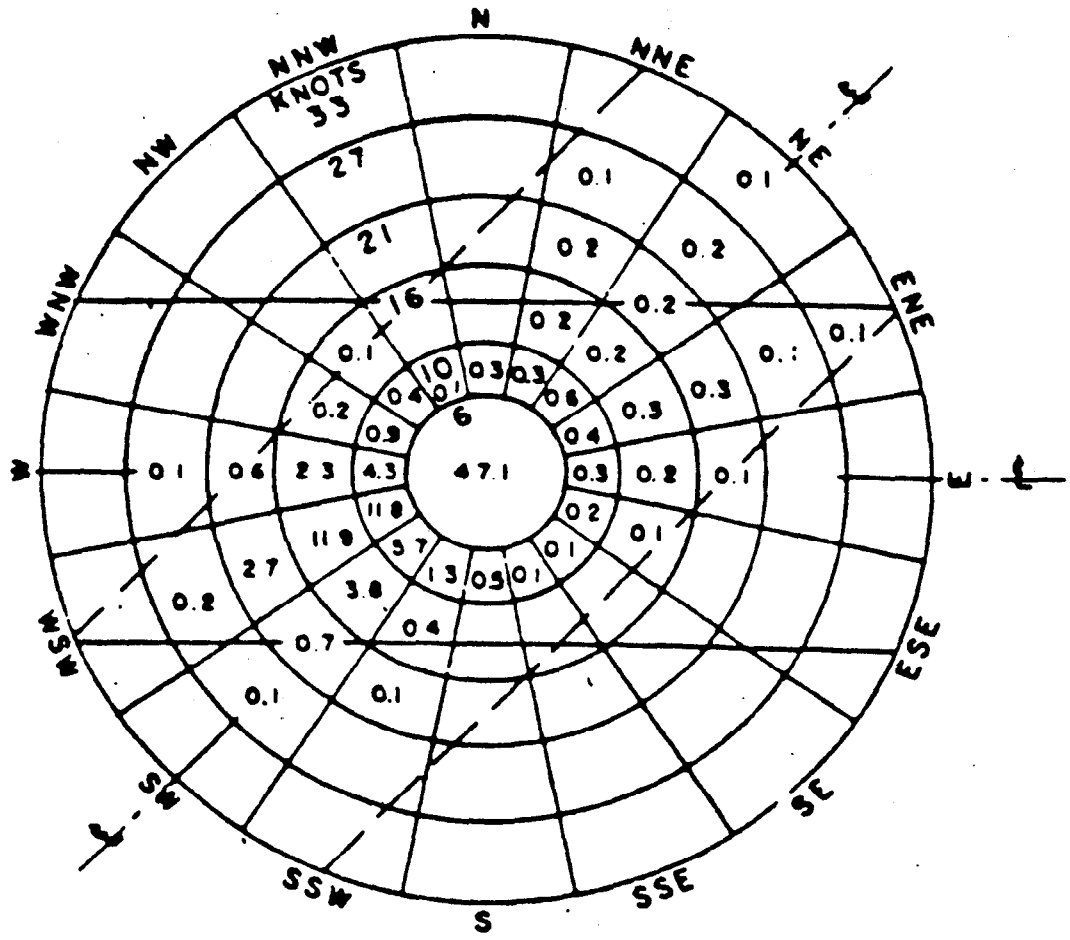
Wet weather access to the fill area is provided by a hard surfaced road and working area. The wet weather area is designed to accommodate at least 21 days of refuse fill operation and is prepared as follows:

> Asphalt concrete from road repairs and construction is crushed and stockpiled with site equipment throughout the year. The stockpile is located in an area protected from offsite view. Prior to the rainy season certain haul roads and a dumping area are surfaced with a 12" thickness of this material. Roads and dumping areas are designed to provide adequate drainage during rainfall. Injection wells will be prepared in Class I areas at a minimum distance from scales and accessed with surfaced roads.

WEATHER CHARACTERISTICS -ONTARIO INTERNATIONAL AIRPORT

PARAMATER	ANNUAL RANGE	ANNUAL MEAN
Maximum Temperature - ^{o}F	84 - 110	76
Minimum Temperature - ^{o}F	21 - 47	47
No. Days above 90 ^{o}F		62.2
No. Days below 32 ^{o}F		7.1
Mean Relative Humidity - %		65
Precipitation in. rain		16.1
No. Days Precip. more than 0.1 in.		25.9
No. Days Precip. more than 1.5 in.		0
No. Days with Thunder-storms		3.2
Percent Winds more than 17 kts.		1.5
Percent Winds more than 28 kts.		0.3

Source: National Climate Center and Ontario Airport Weather Station - most recent data available



WIND ROSE

ONTARIO INTERNATIONAL AIRPORT

Exhibit 4

WET WEATHER OPERATION - cont.

Wet weather operations shall be located as far as possible from nearby residences. Particularly odorous loads will be covered as soon as possible with non-odorous solid refuse.

1h. ENVIRONMENTAL CONTROL MEASUREMENTS

Any unusual environmental impact is immediately reported to the City of West Covina. Control Measures for possible impacts are as follows:

IMPACT	CONTROL MEASURES
Noise	Provide mufflers on equipment. Construct earth or refuse fill barrier between the operation and populated areas. Sequence fills to minimize noise impacts on populated areas. Maintain operation at furthest possible distance from residential units during the fill sequence. When equipment is to be started for servicing or maintenance prior to or after normal operating hours it shall be done in an area where noise will not affect nearby residences. Hearing protectors are provided for employees exposed to high noise levels.
Odor	Deodorizing, injection or immediate burial of odorous wastes. Application of daily, interim and final cover. Inspection of cover for cracking: scarifying and applying additional cover as required. Application of organic soil supplements and landscaping on completed areas. Spraying with deodorizing chemicals as required.
Litter	Application of daily cover. Installation of fencing and barriers to intercept and retain blowing paper. Personnel are assigned to collect and dispose of litter. Locate and orient the fill area to reduce the impact of wind on the dumping operation. Minimize the area occupied by the fill operation. Utilize equipment to sweep litter from paved surfaces.

TYPICAL 'A' SCALE SOUND LEVELS

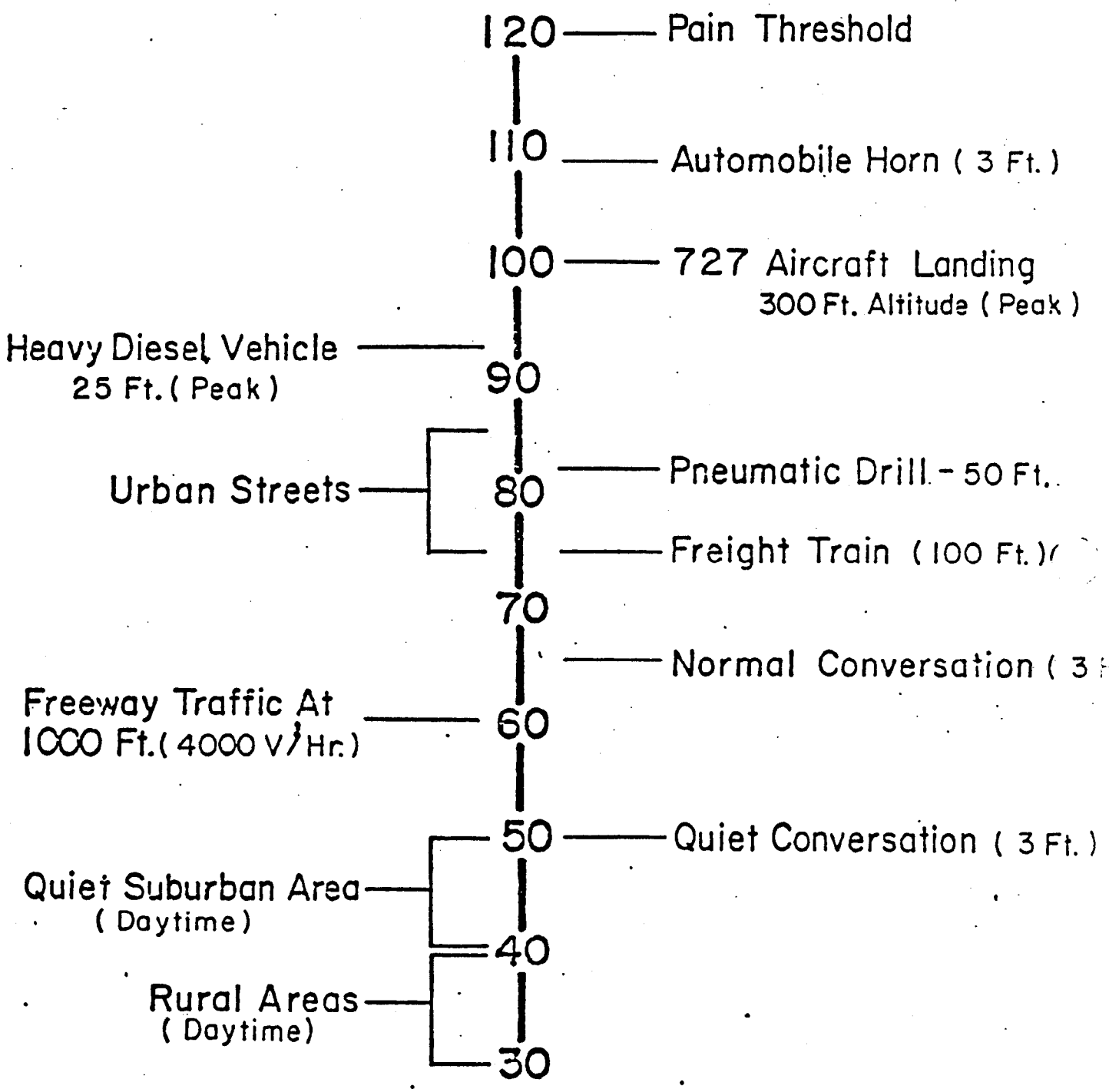
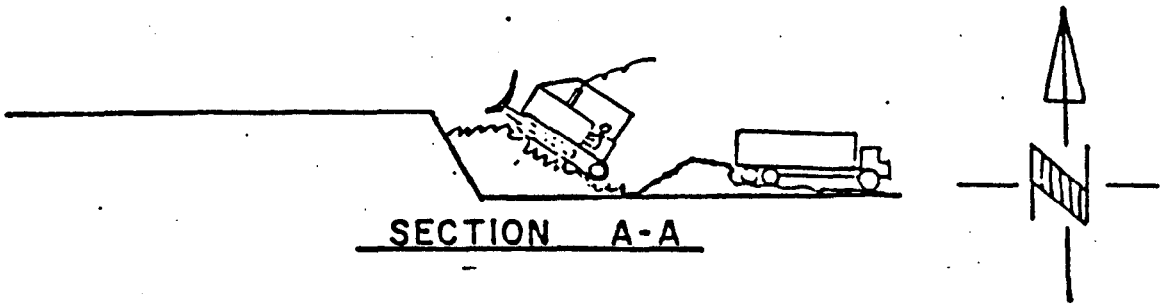


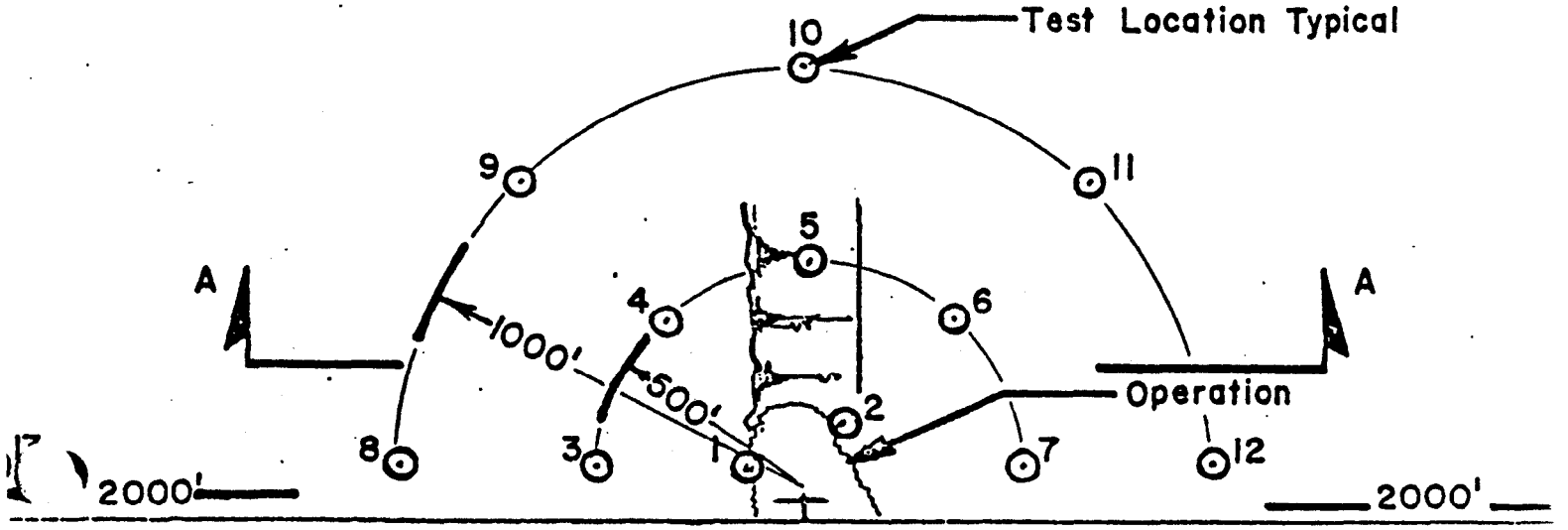
Exhibit 5

TYPICAL OPERATIONAL NOISE LEVELS

(A - SCALE)



SECTION A-A



LOCATION NUMBER	READING (dB)	LOCATION NUMBER	READING (dB)
1	73	8	58
2	87	9	62
3	58	10	66
4	61	11	69
5	72	12	63
6	77	13	47
7	69	14	57

Exhibit 6

Dust	Sweep dust from paved roads. Wash down paved roads with water trucks. Permit unrestricted growth of native plants in some areas. Application of water with site equipment. Pave heavily traveled permanent roads. Temporary paving of interim access roads. Installation of sprinkler systems on completed areas. Utilize select large grained soil materials when available for roads and operating areas.
Insects and Rodents	Application of daily and interim cover (Note: additional measures have not been required).
Fire	The local fire department is called immediately. On-site water trucks are dispatched to fire location. Crawler tractors would be utilized to uncover any buried fire. Exposed fire would be extinguished immediately and covered with earth. Scrapers would be utilized to transport earth for fire fighting. T20 and 10 pound size class ABC fire extinguishers are available on site vehicles for extinguishing small fires. Bare ground is maintained around dumping areas. A water storage tank is available on site to refill water trucks quickly. Water trucks are adapted with fire department fittings to supply water for fire department use in fire fighting.

1i. SALVAGE

A resource recovery project is being conducted at the site. Metal and other items are removed by hand from the dumping area and sold. The removal of materials is done with the cooperation of all operating personnel. No sale of salvaged materials is accomplished on the site.

1j. NOISE IMPACTS

In 1976-77, residential structures were constructed as close as 300' from future operating areas. Typical operational noise levels are shown on Exhibit 5. Persons depositing wastes at the site would be exposed to operational noise levels during the short time required to discharge their wastes. Neither local residents or customers would be exposed to hazardous noise levels. (See Exhibit 6).

From the scale the liquid waste transport vehicle moves to a location near the site laboratory for sampling and analysis of the waste. A one quart sample of the liquid is obtained with a sampling "thief" and tested for: PH, offensive odor, flammability, presence of cyanide and general compatability with the liquids previously deposited in the common disposal area. The sample is retained for seven days. If the data obtained by testing varies substantially from the information reported on the Waste Haulers Record Form the following actions are taken:

The producer is contacted to determine the reason for the error and the correct information.

Site supervision is notified.

The load is rejected.

The California State Department of Health is notified for appropriate action or instructions.

If the error is corrected and instructions received from competent authority, the load may be properly disposed of on site to prevent further danger to the public health.

When the appropriate method and location for disposal is determined, appropriate entries are made in the site log, and the driver is then given specific instructions. A driver who fails to follow instructions will be prohibited from entering the site. A colored placard is placed in the truck windshield indicating to site personel as follows:

1. Yellow - Injection well disposal, number of well is written on card.
2. Red - Special supervised burial.
3. Green - Daily disposal area.
4. Orange - Injected below refuse or liquid in daily disposal area (odorous material

Site supervision is notified for appropriate action by radio or telephone when red or orange placards are placed on a vehicle.

2. TYPES AND RELATIVE QUANTITIES OF WASTES TO BE RECEIVED

All wastes received and disposed of at the BKK Landfill are described in Appendix B.

2a. SPECIFIC PROCEDURES FOR HANDLING SPECIAL WASTES

Special wastes are disposed of using methods designed to minimize hazards to operating personnel and populated areas. Small dead animals are dumped and covered immediately. Most non-hazardous wastes are disposed of by dumping them into the liquid disposal hole and covering them with refuse.

2b. HAZARDOUS WASTES

A wide variety of hazardous wastes are accepted for disposal at the BKK Landfill. These fall into some general categories. The first is oily waste from petroleum refineries. This waste presents few problems during disposal due to its generally non-reactive and non-odorous nature. Another group of hazardous waste is composed of manufactured chemicals and biological products. Such wastes may be reactive, toxic, flammable, irritating or infectious. This group includes spent acids and caustic solutions from the metal finishing industry, carcinogens, pesticides, tannery wastes, cultures from biological tests, blood from autopsies, and refined petroleum products. However, this list is by no means exhaustive. Appendix B includes tables that indicate the quantities and types of wastes disposed of at the BKK Landfill for the year 1977.

(1) Specific Procedures for Receiving Wastes

Both solid and liquid waste transport vehicles arriving at the site are stopped and weighed at the scale to determine the tonnage and type of material to be disposed of within the site. Fees are charges, based on this information:

> A liquid waste hauler is required to have a California State Liquid Waste Hauler Record form. The manifest is inspected to determine the type and class of material and insure the proper entries are made. The driver of the vehicle is questioned to obtain general information concerning the waste. The waste hauler record form is retained at the scales until the vehicle finally leaves the site.

A record is made of each load evaluated in the site log including the comparison of reported values and test results, method of disposal, and map location coordinates of disposal if appropriate or required.

(2) Procedures for disposal

Actual disposal of hazardous wastes is accomplished in three ways at the BKK Landfill:

a. Strong liquid acids and caustics are piped directly into injection wells drilled into portions of the landfill. Individual wells are located on site plans by survey, covered with earth and abandoned when filled with sediments from the loads deposited within. Wells are drilled at locations where refuse depths exceed 100'. The wells are usually 54" in diameter and capped with a metal dome or an 8' x 8' x 3/4" steel plate. (Exhibit 7). Connection, disposal, and disconnection is directed by sign in a manner designed to prevent exposure of personnel to hazardous liquids, vapors, or gasses. A emergency shower/eyewash unit is located in the well area and by the scale office.

b. Routinely accepted non-reactive liquid loads are discharged into a prepared cavity constructed of the daily refuse intake. As much as 33% liquid waste by weight is safely disposed of daily using primarily this method. This ratio is the maximum permitted by City of West Covina U.U.P. 71, including all liquids received.

c. Extremely hazardous, highly volatile odorous or oxidizing liquids or solids are separately buried and covered immediately with refuse or earth.

d. Biological and carcinogenic wastes are received in sealed plastic bags, and buried immediately with refuse.

e. Containerized hazardous solid and liquid wastes including P.C.B. wastes are buried in virgin ground when required. The elevation and survey coordinates of such burials are recorded on site maps. The items are carefully placed in special excavations and covered to prevent damage or rupture of any container.

LIQUID DISPOSAL WELL

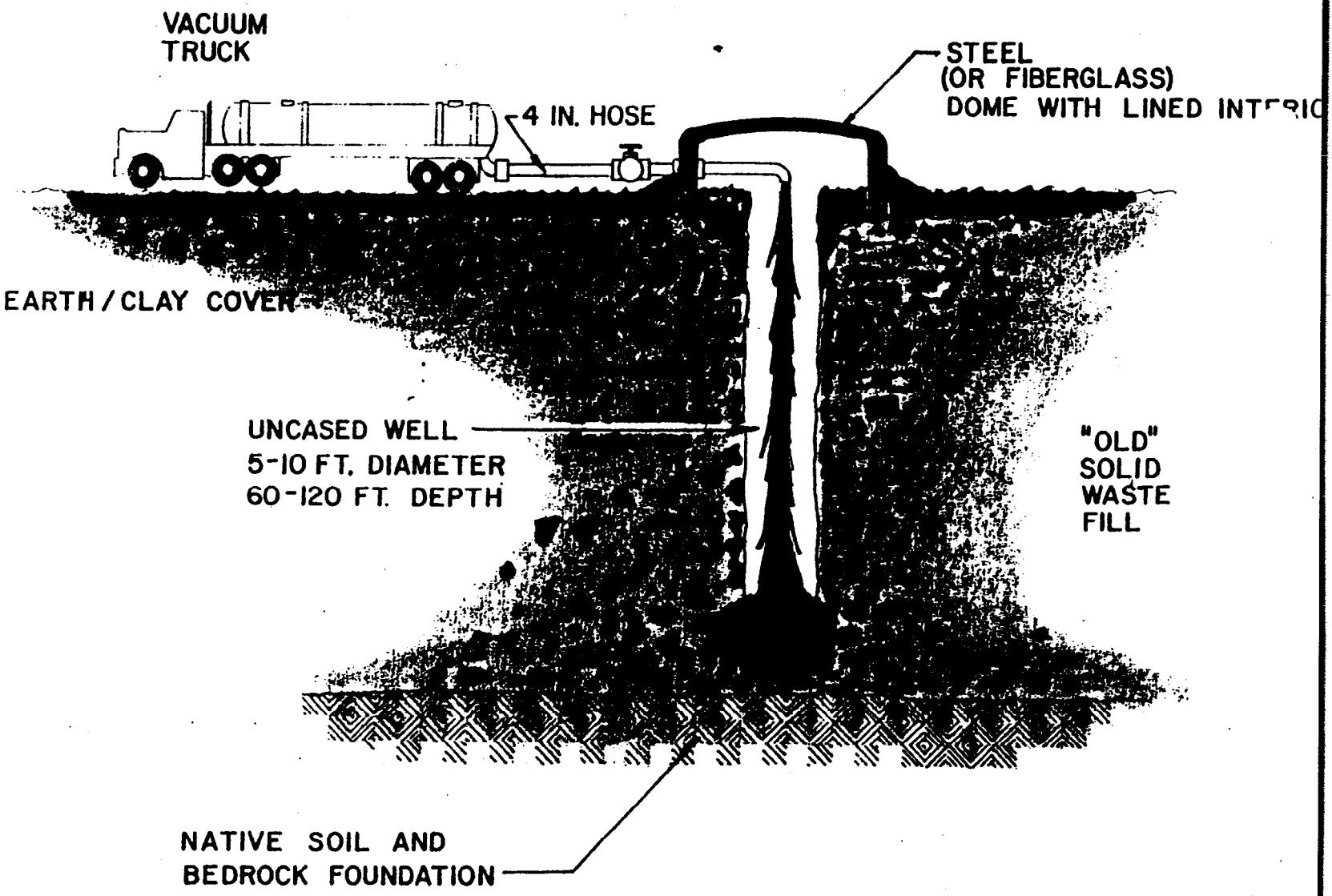


Exhibit 7

(3) Types and amounts of hazardous wastes received

Appendix B contains a list which indicates the quantities and types of hazardous wastes received.

(4) Contingency Plans

Site management is responsible for 24 hour response in the event of accidents, site security violations, odor, fire or other unusual occurrences. One of the following individuals is always available to organize and manage an appropriate response as described above. Additional employees would be contacted if necessary.

Foreman	Charles Chestnut	(213) 965-9382
Operations Mgr.	Jack N. Thompson	(213) 429-3186
Engineer/MGR.	Joseph R. Johnson	(213) 831-8615
Engineer	Alex C. Weston	(213) 963-4425
BKK Corp.	(24 hour number)	(213) 432-8461

Instances of response to unusual occurrences and action taken would be documented, filed in the site log and reported to the city and other regulatory agencies as required. Site management and personel are required to cooperate with any fire or police activity at the site.

The potential exists for accidents to occur which involve skin contact with waste, inhalation of vapors or exposure to fire resulting from hazardous waste.

a. Fire

In the event of a fire the following steps art taken in order:

Small fires are quickly extinguished by covering them with earth or dry chemical using 10 and 20 lb. type fire

extinguishers.

Personnel are removed from the area of fire.

The fire department is called.

Paramedics and an ambulance are called if required.

Water carrying vehicles are brought to an upwind location and water applied to the fire.

D-9 Dozers push earth over the fire from upwind.

633 Scrapers transport earth as required until the fire is extinguished.

b. Skin Contact

Contact with hazardous materials is guarded against by supervision and testing procedures, protective equipment and clothing, well injections, and separate immediate burial. In the event of skin or eye contact with hazardous materials the affected area will be washed with either sterile eye and skin neutralizer which is available on site supervisors vehicles or at first aid stations, or water from emergency showers.

Dressings are available in site first aid kits. The fire department paramedics and an ambulance will be called if necessary. Medical attendants and physicians would be fully informed concerning the type of waste involved.

c. Inhalation

Inhalation exposures are protected against by supervising the disposal of wastes received and separate disposal of certain hazardous wastes. Procedures used at injection wells also protect site personnel and truck drivers.

Chemical cartridge respirators are available if required for handling certain substances.

In the event of the accidental inhalation of a toxic or noxious vapor or gas, the following devices are available for escape or rescue:

30 minute emergency oxygen supply units.
Self-contained air supply (30min.)

If required the fire department paramedics and ambulance are called. Attendants and doctors would be informed concerning the type of waste involved. Physicians and hospitals are available locally for employees requiring additional medical attention.

d. Spill

An accidental surface discharge of hazardous waste would be controlled by covering or absorbing the materials with earth and ultimate permanent burial.

Employees are trained in the described procedures. BKK has experienced very few accidents such as those planned for herein.

(5) Procedures for closure and perpetual maintenance

Planning for closure of the BKK site involves only final cover, grading for drainage and landscaping at this time. Continued site maintenance, monitoring, and operation of planned gas extraction systems is anticipated and shall be accomplished according to local, federal, and state regulations as applicable.

3. ACREAGE CAPACITY AND ESTIMATED LIFE OF THE SITE

The approximate total acreage contained in the permitted site is 583 acres. The estimated capacity is 61,000,000 tons, assuming an in-place refuse density of 1350 lbs/cy. yd. Life expectancy of this site was derived by calculating the total volume in cubic yards found between existing elevations and proposed elevations, using a planimeter, on a 1" - 200' scale contour map. By multiplying 1350 lb/cy (.667 tn/c.y.) as the compacted in-place density of refuse (found by experimentation) by the total calculated remaining volume in cubic yards, the site's total tonnage capacity is calculated. The current monthly tonnage intake is totaled from weights recorded on scale receipts. The annual tonnage received is divided into the tonnage capacity remaining to calculate the years of site life expectancy. Based on these claculations the BKK site is expected to provide capacity for 70 years.

1978
70
2048

(tons/c.y.) x (cal. total c.y.) = (total tons cap.)

$$\frac{\text{(total tons cap.)}}{\text{tons/year}} = \text{years of life expectancy}$$

4. GENERAL LOCATION OF THE DISPOSAL SITE

Location of the BKK Landfill is shown on Exhbits 8 and 9. Access conditions including turn pockets from traveled streets are shown on Exhibit 10. Traffic stacking lanes are indicated within the scale area. Access to the site is restricted by chain-link type fencing, topography and gates across access points. Gates are kept locked by site personnel at times when the site is not open to the public. Emergency phone numbers are posted at access points.

Daily traffic volume averages 1,000 vehicles. Vehicle types include private autos, municipal compactor trucks, truck tractors with semi trailers of all types, tank trucks and refuse transfer trucks.

5. PLOT PLAN AND SITE OWNERSHIP

Property boundaries are shown on Exhibit 9. The site is owned by BKK Corporation. An adjoining 560 acres in the City of Walnut was purchased by BKK Corporation in 1978.

6. ADJACENT LAND USES AND PLANNED DISPOSAL AREAS

The existing disposal area is shown on Exhibit 11. The relationship to adjacent development is shown to scale on Exhibit 12 which also indicates the zoning of adjacent properties.

7. DEVELOPMENT STAGES

A comparison of the existing site topography and the final grading plan (Exhibit 16) shows the areas where additional fill volume is required to construct finish contours. A typical three year plan is presented on Exhibit 14.

8. TOPOGRAPHY

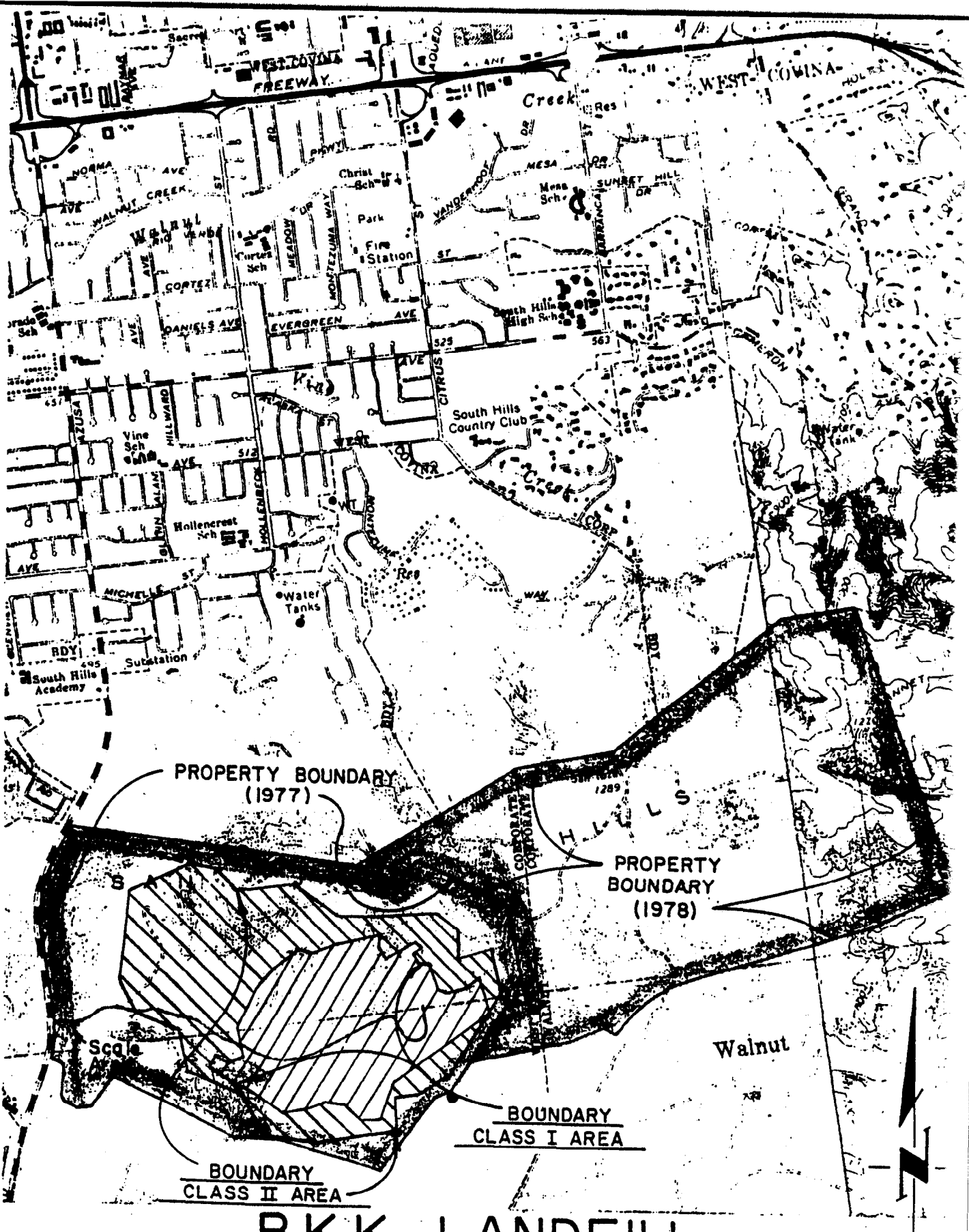
Exhibit 15 shows site topography as of May 1963. Exhibit 11 shows the site topography as of October 1977. Normally site topographic maps are updated annually for engineering reference. Exhibit 16 shows the final grading plan for the site.

9. SITE GEOLOGY

Soil Engineering and Geology Report, dated December 1973, prepared by Pacific Soils Engineering, Inc., Irvine California, completely describes the soil and geological formations of the site. This report can be made available on request.

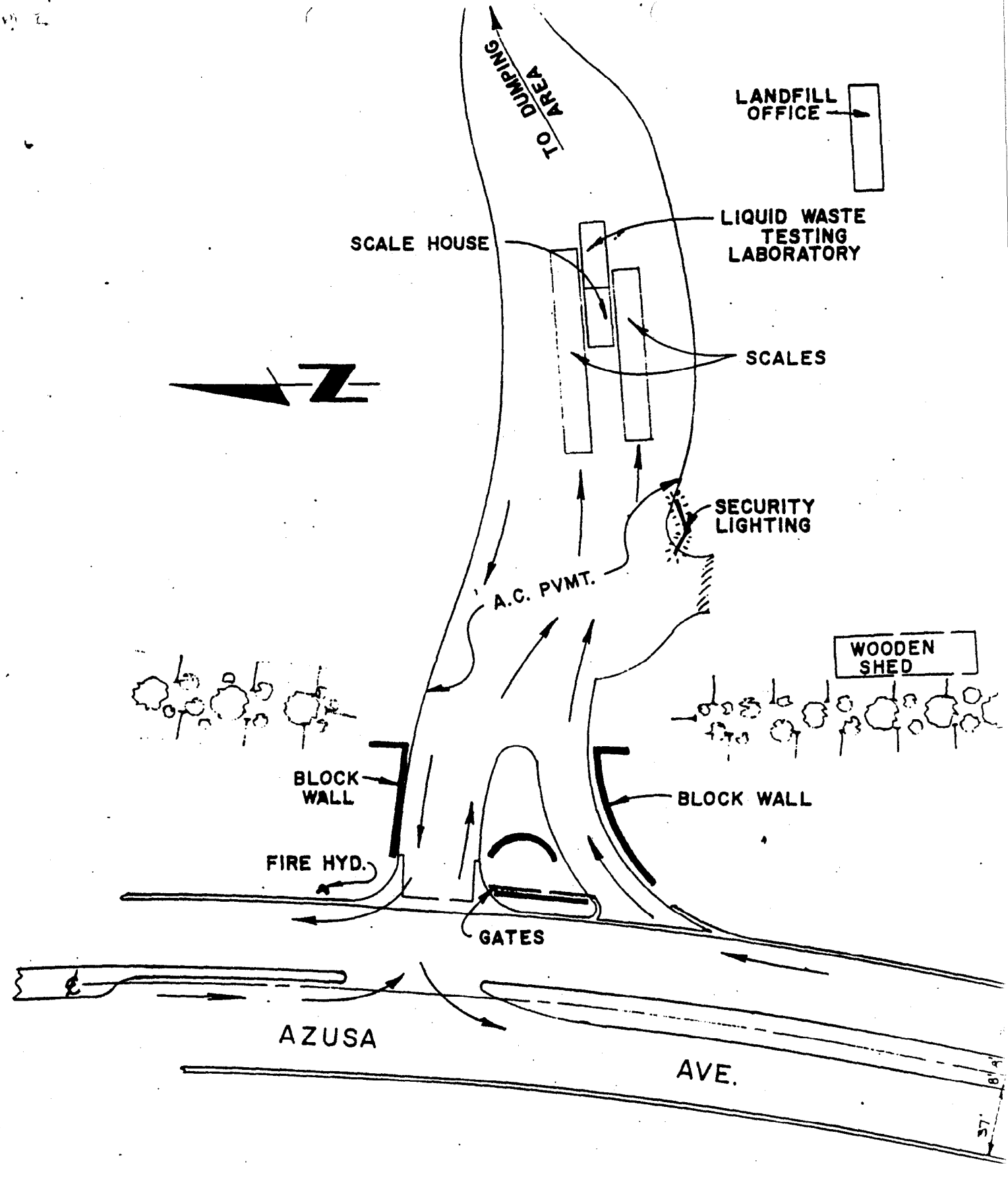
LANDFILL LOCATION

Exhibit 8



B.K.K. LANDFILL
U.S.G.S. PLAN

Exhibit 9



ACCESS & SCALE AREA PLAN

EXHIBIT 10

Surficial soils on the site consist of earth fill, solid waste fill, natural soil, alluvium and slope wash. Dark gray silt, sandy silt and clayey residual soils ranging from 1.5 to 3 feet in depth are found on knolls and steeper natural slopes. Aluvium underlies the lower broad areas and occupies subsidiary canyons, probably varying from 3 to 15 feet in depth. The alluvium consists of moderately stiff clayey silt and silty clay. Slope wash underlies the recent alluvium in the main canyon area and overlies the bedrock in the upper draws and lower portions of the natural slope areas. The slope wash is predominently moderately dense to dense silty to sandy and clays and silts.

Late Miocente Puente Formation rocks are divided into two major units on the site: a shale and siltstone unit and an overlying sandstone and conglomerate unit. The site is underlain mainly by shale and siltstone, consisting of brown and gray clayey siltstone and platy clay shale. Occasional thin lenses of tan medium grained sandstone occur in the shale and siltstone unit. At the west end of the site, dense tan sandstone and conglomerate beds with occasional thin beds of shaley siltstone crop out. This material is massive, well cemented and for the most part should be no more permeable than the shales and siltstones. However, thin permeable lenses do occur as evidenced by fresh water in one boring site.

From a geologic structure standpoint, the site is located on the western nose of the westerly San Jose Anticline. Bedding on the site is westerly with several small northwesterly plunging folds occuring in the central portion of the site.

Several minor shear zones are in evidence, but there is no indication of recent movement. Landsliding in the form of bedding failures and shallow soil slumps has occured where slopes have been undercut by grading or stream erosion.

Overall, the topography and natural materials onsite are relatively impermeable, which makes the site suitable for landfill use.

The findings of the Pacific Soils Engineering, Inc. 1973 soils and geological study, performed in conjunction with preliminary planning for site use, were:

1. Based upon the results of this investigation, the site is suitable for the intended use as a future recreational area following completion ofconstruction by the landfill method as designed.

2. Based upon this investigation, it may be stated that foundation materials for the landfill should be adequate to support the proposed fill and that proposed fill slopes will be stable provided recommendations outlined are followed.

3. At this time, the site meets the State standards for a Class I Landfill in those areas designated for such, provided the following recommendations are carried out.

4. The area west of the Class I site extension designated Class II site meets the State of California criteria for Class II disposal sites, provided a leachate collection system is constructed

The findings and recommendations contained in this report are predicated upon field exploration and observations. The soil and bedrock immediately adjacent or beneath may have different characteristics. It is the opinion of this firm that the site is compatible with the proposed interim use and ultimate development.

Provisions of the solid and geological report (not included above) cover the erection of hydraulic barriers, establishing monitoring and extraction wells, and other recommendations which have become the basis for development of the site and its operation as a Class I Landfill.

10. DRAINAGE

Exhibit 17 shows drainage plans for the completed site. The three year plan (Exhibit 14) shows interim drainage plans. Existing storm channels are adequate to accomodate interim storm drainage. Permanent drainage structures are designed according to Los Angeles County Flood Control District requirements and must be approved by the City of West Covina.

11. LEACHATE MONITORING AND CONTROL

Significant leachate generation is not anticipated due to the prevailing arid climate of the region. The refuse is contained within highly impermeable bedrock formations. Any leachate which may be generated would be contained within hydraulic barriers designed to retain liquid. Leachate extraction systems have been designed and constructed as a part of the required barrier system. Exhibit 11. Poor quality groundwater exists in the alluvial deposits in the site. No known use is made of this water. The barriers constructed into bedrock cut the alluvial deposit thereby retaining this water and any leachate within the site. Extraction systems

pump this water for monitoring and dust control purposes. Required analysis of the water has discovered no evidence of leachate to this date.

12. MONITORING WELLS

Certain wells indicated on Exhibit 11 are used for monitoring groundwater for contamination. The results of certified testing laboratory analysis of samples taken from sampling wells are reported to the Regional Water Quality Control Board and the City of West Covina as required by the current permits. A sample report is presented in Appendix G.

13. GAS CONTROL

Exhibit 11 shows the location of gas monitoring probes. The probes are tested monthly to determine the presence or absence of combustible gas originating within the landfill. The results of the tests are reported to the City of West Covina. Exhaust gas systems similar in design to those currently in use at the Los Angeles County Sanitation Districts Palos Verdes Landfill would be installed if gas migration is detected at property boundaries.

Within the boundaries of the refuse fill area one gas extraction and flaring system has been constructed. A permanent gas extraction system is being designed for the entire landfill. (Exhibit 11) Final plans for the site will connect current and future gas recovery systems. It is anticipated that methane gas recovered from the landfill will be used as a source of useful energy. The exact method of using this landfill gas is under study at this time by BKK Corporation.

14. ULTIMATE LAND USE

The master development plan for the site has been prepared pursuant to Unclassified Use Permit No. 71, Revision 5 (As adopted by City Council Resolutions No. 4919, 5040, and 5211) (see section 16). The plan at this time is for ultimate development of refuse fill areas as landscaped open space. (Exhibit 16) A revised master plan has been requested by the City Council within one year. The land use plan is not expected to change signifigantly, however the City Council may from time to time direct that different plans be prepared.

15. ORGANIZATION

a. Management

The BKK Landfill is owned by BKK Corporation and operated by BKK Landfills, a division of BKK Corporation. Corporate offices are located at 3031 E. "I" Street, Wilmington, California, 90744.

The landfill is managed by Mr. Ben K. Kazarian, President BKK Corporation through Mr. Joseph R. Johnson P.E., Vice President, Engineering and Mr. Jack N. Thompson, Vice President, Landfill operations.

The engineering of the site is done by Corporate Staff under the direction of Mr. Johnson (CE 27056). Consultants are retained as required.

b. Staff

The landfill staff managed by Mr. Johnson and Mr. Thompson is listed below. The experience of the landfill managers is presented in Appendix C. A manager, engineer or foreman is available on on site during hours of operation.

PERSONEL LIST

Alex Weston	Engineer
Colleen McIntosh	Secretary
Charles Chestnut	Foreman
Florencio Bustillos	Operating Engineer
Ambrose Chapman	Operating Engineer
Allen R. Gilbert	Operating Engineer
Denver Hopkins	Operating Engineer
Sal Mastrianni	Operating Engineer
Martin Oceguera	Operating Engineer
J.R. Weise	Operating Engineer
Ernest T. Winter, Jr.	Mechanic
Gregorio Gomez	Mechanic
Michael Lopez	Water Truck Driver
Rene Robles	Water Truck Driver
Ron Sager	Weighmaster
Tom Henry	Weighmaster
Lawrence Mullins	Weighmaster
Pat Rusackas	Chemist/Weighmaster
Larry Martinez	Site Maintenance
William Melendrez	Spotter
Kelly Dominguez	Spotter
Chris Sabkoviak	Spotter
Kevin Adrains	Spotter
Randy McKnight	Part Time

c. Training

Union Employees in the operating engineer, mechanic and truck driver classifications are expected and required to be of journeymen level. Specific knowledge relative to refuse handling is learned "on the job" under the supervision of the foreman and Mr. Thompson.

Weighmaster and chemist classifications are trained on the job under the technical supervision of Mr. Johnson.

Refuse load "spotters", a general laborer category, are trained by the foreman.

A safety program is conducted through a series of regular meetings wherein Mr. Thompson and the foreman provide specific instructions on job related hazards and methods of avoiding accidents and/or injury.

d. Records

Daily records of types and weights of loads received are made on computer punch cards. The resulting calculations and tabulations provide necessary records and data for reports of:

Gross receipts
Solid Waste received (tons)
Liquid Waste received (tons)
Liquid Waste received (gallons)
Liquid Waste types (toxic or non toxic)
Liquid Waste types (common name)

Copies of California Liquid Waste Haulers Record Forms are retained as required by state law. Monthly data is collected, recorded, and reported concerning landfill gas migration, groundwater level and quality at hydraulic barriers. Any water pumped from behind a barrier is metered and reported.

A site log book is maintained which contains a record of solid and liquid hazardous waste loads disposed, the results of any sampling, date and time of disposal, and location of disposal. A 1" = 100 plan is maintained of the hazardous waste disposal area showing coordinates, elevations, and type of waste disposed in the various locations. Injection wells are also recorded on this plan.

The West Covina Fire Department has been given this plan for reference.

Additional information is contained in the site log book including but not limited to:

Accident Reports
Fire Reports
Explosion Reports
Earthslide Reports
Unusual Occurrences
Flooding Occurrences

e. Engineering

All Engineering records and designs are maintained at the site including:

Annual Topographic maps
Utility Plans
Three Year Plan
Drainage Plans
Volume Calculations
Injection well and Hazardous Disposal locations
Survey Control
Gas Monitoring and Recovery System Plans
Geologic & Soils Plans and Reports
An Approved Master Development Plan

f. Safety

Records of accidents required by the State Division of Industrial Safety are maintained at the site.

g. Communications

The site has normal telephone communications during hours of operation.

An F.M. base radio station is located in the scale office. Mobile F.M. radios are located in the managers vehicles, the foremans vehicle, and the engineers vehicle. A hand held radio on the same frequency is available for portable use.

The radios are routinely used in managing site operations and would be used in managing emergency responses.

16. CONDITIONS, CRITERIA AND REQUIREMENTS

The following is a list of local regulatory documents:

1. City of West Covina Unclasified Use Permit No. 71, Revision 5 (Amendment) (As adopted by City Council Resolutions No. 4919, 5040, and 5211) (Appendix D)

2. City of West Covina Business License No. 1516 1978.

3. California Regional Water Quality Control Board, Los Angeles Region order number 75-145, Waste Discharge Requirements for the BKK Company Class I Landfill, West Covina, Los Angeles County, California (Appendix E).

4. State of California South Coast Air Quality Management District.

   Permit to operate
   a. Gasoline fueling equipment P62017
   b. Landfill gas incineration, equipment M00013 (Appendix F)